

Carolyn Kupper

Please see the attached comments submitted on behalf of Kathryn Moxley, Director, Remediation and Environmental Policy, The Boeing Company.

September 17, 2026

VIA ELECTRONIC FILING

Re: Comments to Support Development of NMED and NMEIB Reports Directed by House Joint Memorial 3 (HJM 3)

To Whom It May Concern:

On behalf of The Boeing Company (Boeing), I respectfully submit comments to the New Mexico Environment Department (NMED) and the Environmental Improvement Board (EIB) to support the development of the reports required under HJM 3 regarding implementation of the Per- and Poly-Fluoroalkyl Substances (PFAS) Protection Act and assessing the codified exemptions contained therein.

We appreciate the effort New Mexico has invested in establishing the current exemptions outlined in the PFAS Protection Act, particularly those intended to prevent disruption to the aerospace and defense (A&D) industry. Accordingly, we support maintaining the statutory exemption for aircraft and respectfully request further clarification to enhance the protections envisioned by the Legislature.

Boeing previously submitted comments in response to New Mexico EIB 5-61(R). Recognizing New Mexico's leadership in PFAS regulation and the likelihood of substantial stakeholder input, we respectfully resubmit those comments (attached) to highlight areas where regulatory clarification could further strengthen the protections afforded to the A&D industry under the PFAS Protection Act.

We respectfully request consideration of the following key points, detailed further in the attached document:

- Defining "aircraft" to explicitly include parts and components;
- Clarifying that the exemption for equipment used in manufacture and development encompasses materials, consumables, and processes;
- Exempting A&D products from labeling requirements; or alternatively,
- Adopting a broad A&D exemption that safeguards products compliant with applicable federal standards and expressly excludes such items from labeling obligations.

These refinements are intended to help ensure that commercial aviation and the aerospace and defense supply chain within New Mexico can continue to operate without unintended regulatory impacts.

Thank you for the opportunity to provide input. Please do not hesitate to contact me or Tyler Schroeder at (210) 718-4833 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathryn Moxley'.

Kathryn Moxley
Director, Remediation and Environmental Policy
The Boeing Company
Telephone: (425) 965-6680
Email: kathryn.l.moxley@boeing.com

Attachment: Letter from The Boeing Company regarding New Mexico EIB 25-61(R) response, dated March 3, 2026.

March 3, 2026

VIA ELECTRONIC FILING

Ms. Pamela Jones
Environmental Improvement Board Administrator
New Mexico Environment Department- Harold Runnels Building
P.O. Box 5469
Santa Fe, NM 87502

Re: The Boeing Company's Response to New Mexico EIB 25-61(R)

Ms. Jones:

I write on behalf of The Boeing Company (Boeing) to provide comments on the New Mexico Environmental Improvement Board's (EIB) consideration of proposed rule 20.13.2 NMAC, Per- and Poly-Fluoroalkyl Substances (PFAS) in Consumer Products. Boeing appreciates the opportunity to comment and to describe the critical role of PFAS in the aerospace and defense (A&D) industry as the EIB considers adoption of this rule.

Boeing is one of the world's largest manufacturers of commercial jetliners and defense, space, and security systems. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense systems, launch systems, advanced information and communications systems, and performance-based logistics and training. Boeing employs more than 140,000 people across the United States, with major manufacturing operations in eight states. As a top exporter, Boeing has customers in more than 150 countries across the world, and supports airlines and U.S. allied government customers in more than 90 countries.

Boeing submits these comments on New Mexico's proposed PFAS rule because continued access to PFAS chemistries is essential to A&D activities conducted in the State. PFAS-containing materials and processes are used by manufacturers, suppliers, airline operators, and maintenance, repair, and overhaul (MRO) facilities in New Mexico to meet the stringent safety and performance standards required for aircraft, space systems, and defense products. Prohibitions that do not preserve these critical uses could disrupt in-state production, airline operations and maintenance, and national security programs located in New Mexico. This is particularly timely as Governor Lujan Grisham has identified aerospace as a target industry for growth, underscoring the need for clear exemption language in this rule.¹

Importance of PFAS to A&D Industry

Recognizing concerns around PFAS, the A&D industry launched a concentrated effort to identify and map its PFAS use. In 2023, members of the International Aerospace Environmental Group (IAEG), a non-profit consortium of global aerospace companies that collaborate on environmental solutions,

¹ <https://edd.newmexico.gov/choose-new-mexico/key-industries/>

began preparing a technical review to identify known and potential PFAS uses in response to the EU REACH restriction proposal. The resulting publicly available, preliminary report² maps key PFAS applications across the A&D supply chain and documents that PFAS play critical roles in numerous functions, including but certainly not limited to hydraulic fluids, lubricants, coatings, seals, wire insulation, lifesaving equipment, and precision cleaning products.

In August 2023, the Department of Defense (DoD) published its own Report on Critical Per- and Polyfluoroalkyl Substance Uses,³ summarizing direct and indirect PFAS applications that are important to national security. The DoD report emphasizes the technical and programmatic challenges of identifying and qualifying PFAS alternatives and notes that many applications currently lack viable replacements. Both reports illustrate the essentiality of PFAS to the A&D industry while acknowledging that their findings are constrained by information available at the time of publication—particularly limited transparency regarding the complete chemical composition of many consumable items and articles.

Alternative Qualification and Implementation Information

So that the New Mexico Environment Department (NMED) can fully assess the potential impact on the A&D industry, Boeing offers the following context on the complex, time-intensive process required to qualify and implement PFAS alternatives in A&D applications. The manufacture of A&D products—including the processes and materials used—is governed by federal, industry, military, and company-proprietary specifications that ensure rigorous safety, performance, and durability, and that define testing, evaluation, and acceptance criteria. Qualification of new materials or processes to these specifications is a multi-step engineering effort that begins with identifying candidate substitutes and performing initial feasibility assessments. As development proceeds, materials and compatibility testing confirm that chemical, thermal, mechanical, and durability requirements are met. Specific applications may impose additional criteria—for example, flammability resistance for interior aircraft components or electromagnetic effects (EME) protections against lightning strikes. After material-level requirements are satisfied, full system-level performance testing may be required and could even necessitate FAA certification or DoD approval before the alternative is implemented in production. This is an iterative process; failure at any stage can require returning to earlier development steps, and successful qualification of an alternative is not guaranteed.

Qualification and, if needed, certification can take many years because substitutes must satisfy stringent specification-driven performance and safety criteria to achieve FAA certification and DoD acceptance. Because safety is paramount, even relatively simple “drop-in” replacements can require months to approve, while development and qualification of alternatives for complex systems—such as a new hydraulic fluid that must satisfy extensive durability, temperature, and contamination-control standards—can take many years or even decades. For example, the A&D industry’s efforts to replace Halon to comply with the Montreal Protocol illustrate these long timelines: although the Protocol took effect in 1989, the A&D industry continues to seek acceptable alternatives nearly 30 years later.⁴

² <https://www.iaeg.com/workgroups/wg5/activities>; it should be noted that IAEG intends to provide an update to this report in 2026.

³ <https://www.acq.osd.mil/eie/eer/ecc/pfas/docs/reports/Report-on-Critical-PFAS-Substance-Uses.pdf>

⁴ https://www.icao.int/sites/default/files/Meetings/a42/Documents/WP/wp_074_en.pdf

Request for Clarifications on Exemptions Related to the A&D Industry

While a number of exemptions⁵ included in the PFAS Protection Act and consequently the proposed rule appear directly applicable to the A&D industry, Boeing is concerned that the current exemption language may not, as written, fully preserve essential A&D activities. Exemptions A⁶ and I⁷ appear to protect a fully manufactured aircraft or defense product, but they do not expressly address PFAS uses associated with manufacture, maintenance, or repair of these products. The proposed rule therefore does not clearly safeguard related needs that are critical to aviation safety and operations, including:

- The supply chain's ability to manufacture, sell, or distribute A&D parts and components in New Mexico that rely on PFAS to meet specification-driven safety, performance, or durability requirements;
- The ability of airlines and operators to purchase and obtain PFAS-containing parts, components, and/or formulations for routine aircraft maintenance, repair, and operational needs;
- The availability of PFAS-containing parts, products, and materials critical to aircraft maintenance, repair, and overhaul (MRO) activities.

As noted above, the design and manufacture of A&D products are governed by federal, military, industry, and company-proprietary specifications. The process to qualify and implement PFAS-free alternatives is often technically complex, time-consuming, iterative, and in many cases viable substitutes do not currently exist. To avoid unintended disruptions to parts manufacture, operations, and the safety and airworthiness of aircraft, Boeing requests that NMED clarify that the provided exemptions are intended to protect PFAS use throughout the A&D lifecycle, including manufacture of parts and components, airline operation and maintenance, and MRO activities. To reduce ambiguity, Boeing respectfully requests that NMED consider adding the following definition to the regulation:

"Aircraft" means a device used, or intended to be used, for flight in the air, including parts and components for use in such devices.

Further, we believe the intent of Exemption N⁸ is to extend protection to the manufacture or development of the entire exempted product—not limited to the physical "equipment" used in production. Accordingly, Exemption N should encompass PFAS-containing parts, components, consumables, process chemicals, and any other materials and processes necessary to manufacture, maintain, or repair the products described in exemptions A–M. We ask that NMED please clarify the intended scope and limitations of Exemption N by defining "equipment" as provided below:

⁵ including 20.13.2.10.A, D, I, J, K, M, N, and P

⁶ a product for which federal law governs the presence of a per- or poly-fluoroalkyl substance in the product in a manner that preempts state authority

⁷ a watercraft, an aircraft, a lighter-than air aircraft or a seaplane;

⁸ equipment directly used in the manufacture or development of the products described in Paragraphs A through M of this section;

"Equipment" includes machinery, tooling, consumables, process chemicals, parts, replacement components, and any materials or processes used in manufacture, maintenance, repair, replacement, or servicing activities.

Without a clear exemption, the A&D supply chain, airlines, and MROs in New Mexico may be unable to obtain or use PFAS-containing materials after the January 1, 2032 prohibition date.

Labeling Requirements for A&D Components

As A&D products meet the definition of "complex durable goods" in Section 20.13.2.7 and thus would be subject to Section 20.13.2.13.D as drafted, Boeing is concerned that the requirement to add symbols and statements to specification sheets and detailed component-level PFAS information to operation and maintenance manuals is infeasible. Manuals such as the Aircraft Flight Manual (AFM) and the Aircraft Maintenance Manual (AMM) are written by OEMs, but their content and revisions are governed by relevant aviation authorities such as the FAA and DoD. Updates are driven by the need to maintain airworthiness, safety, and operational accuracy and must be approved by the appropriate aviation authority.

Moreover, public disclosure of A&D component information on a public website raises national security concerns because much of A&D technical data is export-controlled (including ITAR) and cannot be published without authorization from the U.S. Department of State. Further, requiring the disclosure of intentionally added PFAS on publicly available information prior to purchase risks revealing proprietary design choices and other commercially sensitive information to competitors. For these reasons, Boeing requests that NMED expressly exempt A&D products from the labeling provisions of Section 20.13.2.13.

Request for a Broad A&D Exemption

Given the A&D industry's critical role in transportation infrastructure, national security, and the economy, Boeing recommends that NMED adopt a clear, comprehensive aerospace and defense exemption to Section 20.13.2.10 and 20.13.2.13, modeled on the approach used in Maine's amended PFAS law (38 M.R.S. §1614) (see Maine §4(A)(8)).

A product, process, or service required to meet standards or requirements of the United States Department of Transportation, Federal Aviation Administration, the National Aeronautics and Space Administration, the United States Department of Defense or the United States Department of Homeland Security, United States Department of Energy...

This clarification would help ensure that specialized products, materials, and processes needed to manufacture and maintain aerospace and defense products remain available for such programs and operations. This is particularly important to support Boeing New Mexico, where Boeing develops and produces energy laser technology and supports defense satellite programs and other space products, such as NASA's Space Launch System (SLS) and the CST-100 Starliner. Because defense and space systems operate in extreme thermal, mechanical, and radiation environments — and, for space systems, are generally not serviceable after launch — they depend on specialized chemistries to meet mission-critical performance, reliability, and durability requirements.

Boeing notes that NMED could achieve the necessary protections either by adopting the explicit definition clarifications requested in the earlier section or by adopting a broad A&D exemption as modeled above. Whichever approach NMED selects, Boeing requests that the rule include a separate, explicit exemption for labeling (e.g., Section 20.13.2.13).

Closing Comments

Boeing appreciates this opportunity to provide comment to the EIB on the proposed rule to implement New Mexico's PFAS Protection Act. We would greatly appreciate if you would consider the following changes listed to protect A&D manufacture and its supply chain in New Mexico:

- Include the proposed aircraft definition to explicitly cover parts and components;
- Clarify that equipment for the manufacture and development exemption includes materials, consumables, and processes;
- Exempt A&D products from labelling requirements; or
- Adopt a broad aerospace & defense exemption protecting products required to meet applicable federal standards and requirements, and explicitly exempt those items from labeling requirements.

Please feel free to contact me, or Tyler Schroeder at (210) 718-4833, should you have any questions.

Sincerely,



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